UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,941	05/22/2001	Murray Kucherawy	SMI/0004.01	1938

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EXAMINER
LEZAK, ARRIENNE M

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/863,941	KUCHERAWY, MURRAY
	Examiner	Art Unit
	Arrienne M. Lezak	2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-25_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-25_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _22 May 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _5/29/03_.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail. Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-7 & 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over extensive consideration of US Patent 5,463,620 to Sriram.

3.   Regarding Claims 1, 13 & 21, Sriram discloses a system, (Col. 1, lines 18-67 &

Col. 2, lines 1-30), wherein email and bulk data are obvious forms of relevant network

traffic, (Col. 4, lines 50-53 & Col. 8, lines 5-50), a method for processing a plurality of e-

mail messages that are being sent to recipients at various destination domains, the

method comprising:

-     establishing a plurality of queues in the system, zero or more of these being

     specific queues for handling mail to a specific set of domains, and one being

     a general queue for transferring e-mail to domains not handled by specific

     queues, (Cols. 11-16; note Col. 12, lines 4-53);

-     receiving at the system a request to process for transfer a plurality of

     outbound e-mail message (threads), each e-mail message specifying delivery

     to at least one recipient at a particular domain, (Figs. 1 & 5; Col. 4, lines 43-

     67; Col. 4; and Col. 5, lines 1-34); and

-    for each given e-mail message, processing the given e-mail message by:

determining what domain the given e-mail message is destined for, if the

determined domain for the given e-mail message is a specific domain

handled by a corresponding specific queue, assigning the given e-mail

message to the corresponding specific queue for transferring the given e-mail

to said specific domain, otherwise assigning the given e-mail message to said

general queue, and without waiting for confirmation that the given e-mail

message has been successfully processed for transfer to another system,

proceeding to process the next one of the e-mail messages, (Col. 11, lines 2-

16). Examiner notes that it would have been obvious to one of ordinary skill

in the art at the time of invention by Applicant to note that within a queuing

system, like that of Sriram, confirmation would not be necessary, as it would

defeat the purpose of efficiently integrating diverse traffic types on a single

network. Specifically the requirement of a confirmation would require greater

amounts of bandwidth and network resources, decreasing tolerance to

message delay and loss, (Col. 1, lines 39-57).

Thus, Claims 1, 13 & 21 are found to be unpatentable over considerable consideration

of the teachings of Sriram.

4.   Regarding Claims 2, 3, 4, 19 & 20, Sriram discloses an (email) system, wherein

said system comprises one general queue and optional specific queues, (per pending

Claim 2), wherein said at least one specific queue only handles e-mail messages that

are destined for the specific queue's corresponding domain, (per pending Claim 3),

wherein said general queue handles, (processes to alternate domains – per pending

Claim 20), all e-mail messages that are not processed by said at least one specific

queue, (per pending Claims 4 & 19), (Col. 10, lines 58-67 & Cols. 11-16). Examiner

notes that Sriram teaches placement of each call class in a separate queue. Further,

Sriram discloses the availability of unused bandwidth for other traffic. Moreover, Sriram

discloses multiple queues, which multiple queues are differentiated by traffic type, and

which traffic types would obviously include specific domains as well as the residue in

the form of general (non-specific) domains for purposes of more efficient bandwidth use.

Thus, Claims 2, 3, 4, 19 & 20 are found to be unpatentable over considerable

consideration of the teachings of Sriram.

5.   Regarding Claims 5, 14, 16 & 22, Sriram discloses an (email) system wherein

each queue is associated with at least one message transfer agent (MTA) processing

thread that establishes a connection and transfers a message, (per pending Claims 14

& 22), with a recipient MTA, (Figs. 1, 3 & 5; Col. 1, lines 39-67; Col. 2, lines 1-31; Col. 4,

lines 64-67; Col. 5, lines 1-34; Col. 10, lines 58-67 & Cols. 11-16). Examiner notes that

Sriram teaches a multiplexing circuit, which combines communications traffic from

numerous sources onto the output link, which traffic is selectively directed to a number

of different queuing circuits based on the results of a classification. Examiner notes that

the communications traffic obviously includes messages, which messages are obviously

threads, (identified by classification), and particularly directed based on said

classification. This functionality would obviously read on an MTA thread whose purpose

would be connection and transfer by classification. Thus, Claims 5, 14, 16 & 22 are found to be unpatentable over considerable consideration of the teachings of Sriram.

6.   Regarding Claims 6, 23 & 24, Sriram discloses an (email) system wherein at least one, (general) queue is associated with a set comprising a plurality of MTA processing threads, (per pending Claim 6), (Col. 11, lines 4-17), wherein the set of MTA processing threads for said first queue is dedicated to transferring e-mail messages only to said frequently encountered, (specific) domain, (per pending Claim 23, (Col. 11, lines 4-17), and wherein the set of MTA processing threads for said second queue may transfer e-mail messages to different, (general) domains, (per pending Claim 24), (Col. 11, lines 4-17). Thus, Claims 6, 23 & 24 are found to be unpatentable over considerable consideration of the teachings of Sriram.

7.   Regarding Claims 15, 17 & 18, Sriram discloses an (email) system wherein the actual number of MTA processing threads employed by a given queue is controlled at runtime, (per pending Claim 15), wherein control is based, at least in part, on how many e-mail messages are posted to the given queue at runtime, (per pending Claim 17), and subject to a maximum limit, (per pending Claim 18), and wherein said sets of MTA processing threads is dynamically configurable, for optimizing resources allocated for a given queue, (per pending Claim 7), (Figs. 5 & 6; Abstract; Col. 1, lines 39-67; Col. 2, lines 1-30; Col. 5, lines 35-67; Cols. 6-8; and Col. 12, lines 4-53). Examiner notes that by dynamically controlling the amount of time that packets may be emptied onto a link, the predetermined, (maximum), number of threads is obviously capable of varying per need/use. Thus, should greater or lesser amounts of message (threads) need to be

emptied, Sriram is able to adjust accordingly and provide resources as necessary based on traffic, which traffic is obviously defined by number of (email) messages. Thus, Claims 15, 17 & 18 are found to be unpatentable over considerable consideration of the teachings of Sriram.

8.   Claims 8-12 & 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,463,620 to Sriram in view of US Patent US 6,502,131 B1 to Vaid.

9.   Regarding Claim 8, Sriram is relied upon for those teachings disclosed herein. Though Sriram discloses a system applicable to email use, said system does not specifically enumerate receiving a plurality of outbound e-mail messages from at least one composer program, which automatically composes e-mail messages based on database information. Vaid specifically enumerates the use of SMTP (email) and bulk data, (Col. 7, lines 51-66 & Cols. 14-17), which email programs would obviously include a composition program and which composition program would obviously include a database of information for the sending/receiving/routing of email. In other words, it would be obvious to choose 1+ email address(es) from a database of email addresses within an email program, (i.e.; Outlook), by which to forward emails. Moreover, as Vaid teaches classification by destination, (Col. 17, lines 12-22), and bulk-data SMTP applications, (Col. 16, lines 21-67 & Col. 17, lines 1-22), it would have been obvious to use the same functionalities with an email database of information for automatically composing email messages. The motivation to combine Sriram and Vaid is the need to efficiently integrate diverse traffic types, (Sriram – Col. 1, lines 48-53). Thus, Claim 8 is found to be unpatentable over the combined teachings of Sriram in view of Vaid.

10.   Regarding Claim 9, Sriram alone, and in view of Vaid. is relied upon for those teachings disclosed herein. Vaid further discloses a system that receives a plurality of outbound e-mail messages via Simple Mail Transport Protocol (SMTP), (Col. 16, lines 21-67 & Col. 17, lines 1-22). Thus, Claim 9 is found to be unpatentable over the combined teachings of Sriram in view of Vaid.

11.   Regarding Claim 10, Sriram alone, and in view of Vaid. is relied upon for those teachings disclosed herein. Vaid further discloses creating at least one clone e-mail message upon encountering an e-mil message addressed to more than one recipient; and processing each clone for transfer, (Col. 16, lines 21-67 & Col. 17, lines 1-22). Thus, Claim 10 is found to be unpatentable over the combined teachings of Sriram in view of Vaid.

12.   Regarding Claims 11 & 12, Sriram alone, and in view of Vaid. is relied upon for those teachings disclosed herein. Vaid further discloses creating at least one clone e-mail message upon encountering an e-mail message addressed to more than one recipient; and processing each clone for transfer, (Col. 16, lines 21-67 & Col. 17, lines 1-22). Vaid does not specifically disclose the storage of email contents and a reference to contents such that contents are not duplicated, (per pending Claim 11). Vaid also does not specifically enumerate wherein in the event that a particular e-mail message cannot be successfully processed upon an initial attempt, routing the particular message to another message transport agent (MTA) which is to re-attempt transport, (per pending Claim 12).

13.   Examiner notes that Sriram teaches the storage of Bulk information in bulk memory, (Sriram – Col. 8, lines 5-49), such that it would have been obvious to use the bulk memory n combination with an email functionality to more efficiently forward references to the bulk memory where the information was stored. To a person of ordinary skill in the art, this would have been obvious particularly in view of the efforts that both Sriram and Vaid put into optimization of bandwidth consumption. Moreover, Examiner notes that it is well known in the art for an email program to re-attempt transport upon failure, which re-attempt would obviously include routing through a different agent, as often continued attempts through the same agent would produce the same fruitless results only serving to unnecessarily consume bandwidth, which consumption directly conflicts with the teachings of both Sriram and Vaid. Thus, Claims 11 & 12 are found to be unpatentable over the combined teachings of Sriram in view of Vaid.

14.   Regarding Claim 25, Sriram alone, and in view of Vaid. is relied upon for those teachings disclosed herein. Vaid further discloses a connection cache for storing information about connections that have been made to other domains, (Col. 30, lines 55-67 & Cols. 31-34). Thus, Claim 25 is found to be unpatentable over the combined teachings of Sriram in view of Vaid.
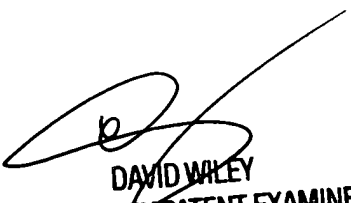
Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Arrienne M. Lezak whose telephone number is (703)-

305-0717. The examiner can normally be reached on M-F 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (703)-308-5221. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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Business Center (EBC) at 866-217-9197 (toll-free).

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